Prioritizing WC Groundfish Stock Assessments and Portfolio Management

NOAA FISHERIES

NW Fisheries Science Center

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Overview of Prioritization

- Decision Environment
- National Assessment Prioritization efforts
- Review of West Coast process and protocols
- Evolution of assessment coverage, by type
- Portfolio balance and suitability

Prioritization Decision Environment

- A Council process
  - Biennial cycle, TORs, Species selection, STAR limits
- Council priority for assessing rebuilding species
- "Update" TOR restrictions
- Slight increases in NMFS assessment staff;
  - But, decreased outside involvement
- More assessments could be done in even years, but
  - Review burden would rise, research would suffer
  - Data used - 1 year farther removed from mgmt.

National Assessment Prioritization Effort

- National Workgroup chaired by Dr. Methot
- Goal of Prioritization:
  - Identify/develop appropriate suite of scientific information needed to prevent overfishing, rebuild depleted stocks, achieve OY
- Identify factors important to prioritization of assessment type and frequency
- Determine appropriate assessment level and frequently for each stock

Prioritization Factors

- Fishery Importance
- Ecosystem Importance
- Stock biology
  - productivity, M, recruitment variability, vulnerability
- Assessment history:
  - Time since last assessment (relative to target)
  - Stock status
  - Previous uncertainties—resolvable or not?
- Recent survey abundance / CPUE trends

West Coast Process and Protocols

- NMFS has developed species lists for consideration
- Generally based on informal consideration of these factors
- Iterative & collaborative process with Council and 3 advisory bodies
- Additional Factors
  - Recent total catch vs ACL/OFL (or contribution)
- This year, greater emphasis on presenting more relevant information up front

Priority Recommendations for 2015

Background Information Pertaining to Selection of Groundfish Stocks for Assessment in 2015.

Species	Suggestions for 2015				Most Recent Assessment and Current Status					PSA	Fleet rank (2008-2012):					2012 catch as a % of		Survey info
											Comm. $		Rec. mt					
	Full	Up D	D-M	Dat Rpt	Cur Tier	Last year	Type	Last Dep.	Rbld?		All	H & L	All	CA	OR-WA	ABC *	OFL *	
arrowtooth fl.			x		2	2007	F	79%		1.21	**8**	48	52		**26**	21%	17%	
bank rf			x		2	2000	F			2.02	**30**	42	47	44		4%	3%	
black rf x2	**X**				1	2007	F	65%		1.94	**6**	**3**	**1**	**1**	**1**	53%	51%	
blue rf			x		2	2007	F	30%		2.01	33	**17**	**4**	**9**	**5**	33%	29%	
bocaccio	**X**				1	2013	U	31%	Y	1.93	42	**26**	**7**	**5**	**13**	20%	19%	
CA scorpionfish			x		1	2005	F	80%		1.41	36	**20**	**5**	**4**		65%	62%	
canary rf	**X**				1	2011	U	23%	Y	2.01	46	67	**17**	**19**	**12**	8%	7%	
chilipepper	x	x			1	2007	F	71%		1.35	**14**	**27**	**30**	**29**	39	17%	16%	
China rf	x		**X**		2	2013	D-M	55%		2.23	**25**	**12**	**16**	**15**	**10**	124%	104%	
cowcod	x			x	2	2013	F	34%	Y	2.13	73	56	45	42		11%	9%	
darkblotched rf	**X**				1	2013	F	36%	Y	1.92	**22**	**24**				22%	21%	
gopher rf			x		1	2005	F	97%		1.76	**12**	**7**	**10**	**7**		42%	39%	
kelp greenling x2	x		x		1	2005	F	49%		1.56	**18**	**10**	**15**	**17**	**6**	79%	59%	
lingcod x2	x	**X**			1	2009	Full	67%		1.55	**7**	**5**	**2**	**2**	**2**	28%	26%	
olive rf			x		3					1.87	47	31	**13**	**13**	31	21%	17%	
POP	x	x		x	1	2011	U	19%	Y	1.69	31	43				6%	6%	
petrale sole	x	**X**			1	2013	F	22%	Y	1.94	**3**	44	40	40	**19**	91%	87%	
quillback rf	x		x		3					2.22	35	**18**	**20**	**28**	**7**	169%	141%	
sablefish	x	**X**			1	2011	F	33%		1.64	**1**	**1**	42	48	**15**	66%	63%	
widow rf	**X**				1	2011	F	51%		2.05	**28**	41	33	32	**17**	6%	6%	
yelloweye rf	x			**X**	2	2011	F	21%	Y	2.00	61	45	**27**	33	**11**	25%	24%	

Key			
	Higher Priority	**X**	Recommended
	Lower Priority	x	Potential
	Constraining, if not ranked in top-30		

Portfolio Balance and Suitability

- Benchmark assessments cannot be conducted for all WC groundfish species: Data & $s
- Before 2005, focus was on the most important commercial (and recreational) species
  - Higher priority on diversification, since
- Frequent assessments for rebuilding species since 2003
- Development of more tools;
  - More assessments, at appropriate level

Recent Assessment History, part 1

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	% of SB_0	in year
Bocaccio	F		F		F		F		U		U	31%	2013
Canary rockfish (rf)			F		F		U		U		cr	23%	2011
Cowcod	U		F		F		U		cr		F	34%	2013
Darkblotched rf	U		F		F		U		U		F	36%	2013
Lingcod	F		F				F					74%	2009
Pacific ocean perch	F		F		U		U		F		cr	19%	2011
Pacific hake/whiting		F	F	F	F	F	F	F	F	F	F	72%	2013
Widow rf	F		F		U		F		F			51%	2011
Yelloweye rf			F	F	U		F		U		cr	21%	2011
Black rf	F				F							53%	2007
Cabezon (CA & OR)	F		F				F					49%	2009
Petrale sole			F				F		F		F	22%	2013
Sablefish			F		F				F			33%	2011
Dover sole			F						F			84%	2011
Shortspine thornyhead			F								F	74%	2013
Longspine thornyhead			F								F	75%	2013
Blackgill rf			F						F			30%	2011
English sole			F		U						DM	89%	2013
Yellowtail rf	U		U								DM	69%	2013

Periods highlighted in pink indicate years in which a stock was managed under a rebuilding plan

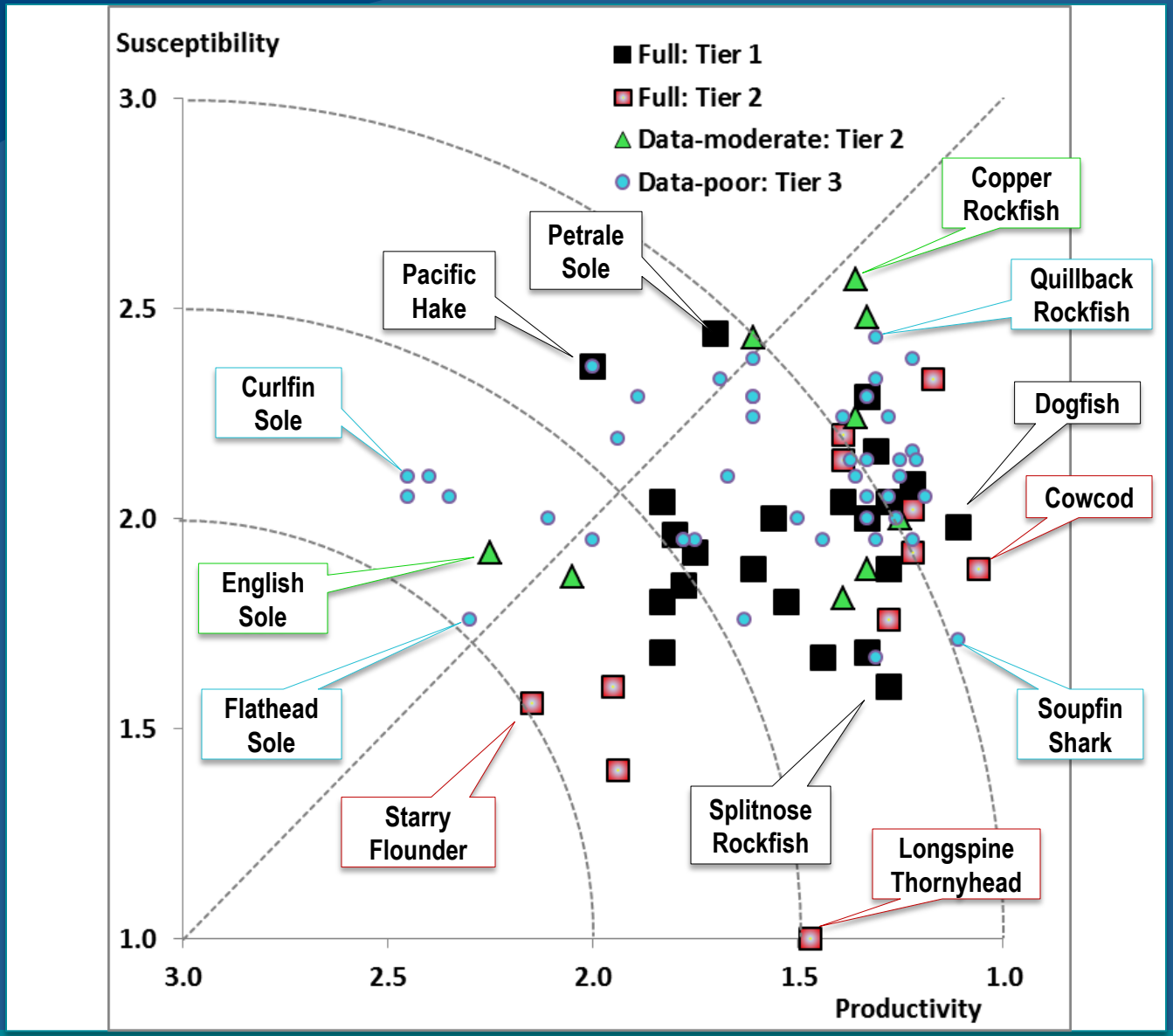
F = Full, U = Update, DM = Data-moderate, cr = Catch report

Recent Assessment History, part 2

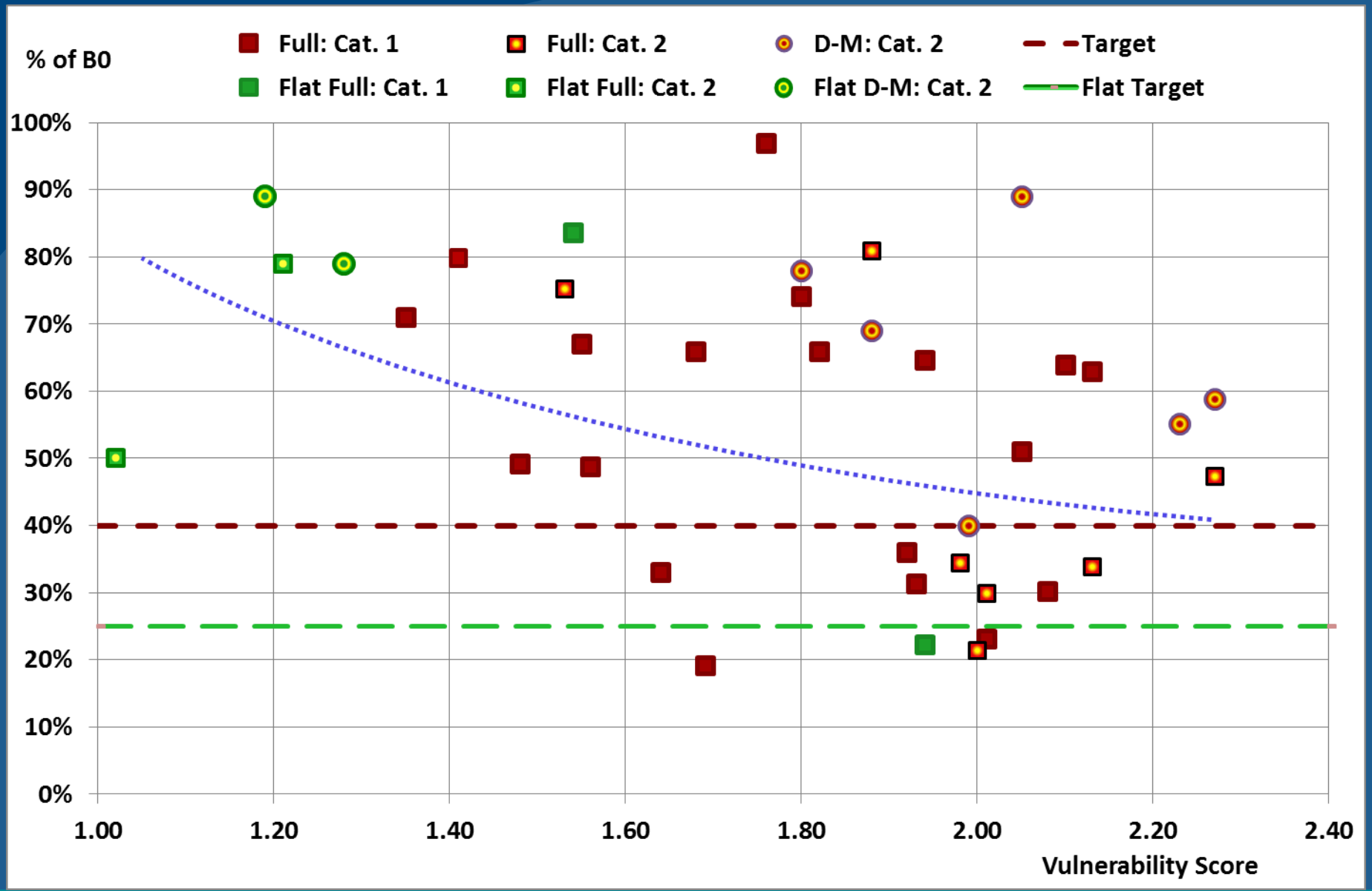
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	% of SB_0	in year
California scorpionfish			F									80%	2005
Gopher rf			F									97%	2005
Kelp greenling (OR)			F									49%	2005
Starry flounder			F									50%	2005
Vermillion rf			F								DM		
Arrowtooth flounder					F							79%	2007
Blue rf					F							30%	2007
Chilipepper rf					F							71%	2007
Longnose skate					F							66%	2007
Shortbelly rf					F							73%	2007
Greenstriped rf							F					81%	2009
Splitnose rf							F					66%	2009
Greenspotted rf									F			35%	2011
Spiny dogfish									F			63%	2011
Aurora rf											F	64%	2013
Rougheye/bl.spotted rf											F	47%	2013
Pacific sanddabs											F	96%	2013
Brown rf											DM	40%	2013
China rf											DM	55%	2013
Copper rf											DM	59%	2013
Rex sole											DM	79%	2013
Sharpchin rf											DM	89%	2013
Stripetail rf											DM	78%	2013

F = Full, U = Update, DM = Data-moderate

Groundfish Vulnerability & Assessment Type



Latest Stock Status and Assessment Type



Summary

- Benchmark assessments cannot be conducted for all WC groundfish species: Data & $s
- Progress has been made
  - Expanded suite of assessment tools
  - Improving prioritization process
- The portfolio has diversified tremendously since 2009, and will continue to do so
  - More updates
  - More, and likely expanded forms of, Data-Moderate assessments
- More work to be done on identifying target assessment frequency/type, application of rubrick